

Title (en)

Telephone circuit using DC blocked transformer and negative impedance technique.

Title (de)

Telefonschaltung mit für Gleichstrom gesperrtem Übertrager und negativer Impedanztechnik.

Title (fr)

Circuit téléphonique utilisant un transformateur bloqué pour le courant continu et utilisant la technique d'impédance négative.

Publication

EP 0346874 A2 19891220 (EN)

Application

EP 89110810 A 19890614

Priority

US 20760788 A 19880615

Abstract (en)

The invention provides a combination in a SLIC for telecommunication applications of ac impedance synthesis, eg. raising the impedance of battery feed resistances by feedback techniques; in combination with real battery feed resistors and a dc blocked transformer. A dc blocked transformer (16) is coupled to line current feed resistors (22; 24) and a feedback loop network to synthesize the desired input impedance, such that the feedback network incorporates both positive and negative feedback. A loop stabilizing resistor is used in shunt with the dc blocked transformer secondary to reduce gain peaking and phase shift. The transformer is an integral part of the feedback loop, and one of the outputs of the solid state circuitry are directly connected to the subscriber line, thereby eliminating the problem of lightning induced transients, in that the output stages of the solid-state operational amplifier circuitry of the invention are transformer isolated from the subscriber line, and are coupled to the subscriber line through high impedances providing high resistance isolation.

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IPC 8 full level

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H04M 19/001 (2013.01 - EP US); **H04M 19/005** (2013.01 - EP US)

Cited by

EP0582439A1; EP0719029A3; US6760433B2; WO03005695A1; US6826278B2; US6542604B1; WO0013335A1; WO0245391A3; EP1069699B1

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DOCDB simple family (publication)

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